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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/460,913	12/14/1999	LIAM DAVID COMERFORD	YO998-522	3104

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EXAMINER

AZAD, ABUL K

ART UNIT

PAPER NUMBER

2654

DATE MAILED: 06/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/460,913

Applicant(s)

COMERFORD ET AL.

Examiner

ABUL K. AZAD

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to the communication filed on March 7, 2002.
2. Claims 1-19 are pending in this action. Claims 1 and 18 have been amended.
3. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. Claims 1-5, 9-12 and 18 are objected to because of the misleading use of "decoding engine." While applicant may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term. See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The term "decoding engine" in claims 1 and 18 is used by the claim to mean "recognition engine" according to specification Page 14, 2nd paragraph. Hence, it would be better to use the standard term --recognition engine--.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1, 3-5 and 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Junqua et al. (US 6,233,561).

As per claim 1, Junqua teaches, "in apparatus for providing a portable spoken language interface for a user to a device in communication with the apparatus, the device having at least one application associated therewith, the spoken language interface apparatus comprising:"

"an audio input system for receiving speech data provided by the user" (col. 2, lines 4-32, audio input system is inherent in this system);

"an audio output system for outputting speech data to the user" (col. 2, lines 4-25, audio output system is inherent in this system);

"a speech decoding engine for generating an output in response to spoken utterances" (col. 2, lines 4-26, perform speech recognition; Fig. 1, elements 26 and 36);

"a speech synthesizing engine for generating a synthesized speech output in response to text data" (Fig. 2, element 34; col. 2, lines 4-26, reads on "translation module to translate the buyer's speech from the determined semantic components into Japanese and perform speech synthesis in order to vocalize the Japanese translation for salesperson to here");

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“a dialog manager operatively coupled to the device, the audio input system, the audio output system, the speech decoding engine and the speech synthesizing engine” (Fig. 1, element 30; col. 2, lines 3-41); and

“at least one user interface data set operatively coupled to the dialog manager, the user interface data set representing spoken language interface elements and data recognizable by the application of the device” (col. 2, lines 3-41, user interface data set as English and Japanese language, where in fig. 1, elements 26 and 36, are used to recognize data set of the language); wherein:

“the dialog manager enables connection between the input audio system and the speech decoding engine such that the spoken utterance provided by the user is provided from the input audio system to the speech decoding engine” (col. 2, lines 12-15; the dialog speech processing system of the present invention uses speech recognizer to transform the English speech to of buyer into a string of words); “(ii) the output generated by the speech decoding engine is returned to the dialog manager” (col. 2, lines 17-20; a dialog manager determines whether a sufficient amount of information has been provided by buyer based upon the semantic components determined by speech by speech understanding module); “(iii) the dialog manager uses the output generated by the speech decoding engine to search the user interface data set for a corresponding spoken language interface element and data which is returned to the dialog manager when found” (col. 4, lines 10-23; dialog manager perform a search); “(iv) the dialog manager provides the spoken language interface element associated data to the application of the device for processing in accordance therewith”

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(Fig. 1, elements 26 and 36 are as applications); "(v) the application of the device, on processing that element, provides a reference to an interface element to be spoken" (Fig. 1, elements 20 and 22 English and Japanese to be spoken); "(vi) the dialog manager enables connection between the audio output system and the speech synthesizing engine such that the speech synthesizing engine which, accepting data from that element, generates a synthesized output that expresses that element" (Fig. 2, element 34); and "(vii) the audio output system audibly presenting the synthesized output to the user" (Fig. 2, element 34, Japanese speech out put to the English spoken person);

"a method for modifying a data structure containing the at least one user interface data set, comprising: adding a new application to the device" (col. 2, lines 42-56, reads on "a flash memory card which is unique to each task can be provided so that a user can switch from one task to another; and also col. 4, lines 1-23); "generating a second user interface data set in accordance with the new application" (col. 2, lines 1-32, reads on "translate module translate the semantic components to Japanese (second user interface data)", "the second user interface data set representing spoken language interface elements and data recognizable by the new application" (Fig. 1, element 36; Japanese recognizer is a new application); transferring the second user interface data set from the device to the apparatus (col. 2, lines 42-56, flash memory is as device and task as user interface data and portable hand-held device as apparatus); and "loading the second user interface data set into the data structure of the apparatus" (col. 2, lines

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42-56, reads on "a flash memory card which is unique to each task can be provided so that a user can switch from one task to another; and also col. 4, lines 1-23).".

As per claim 3, Junqua teaches, "further comprising the step of removing a user interface data set from the data structure" (col. 2, lines 42-56, reads on "a flash memory card which is unique to each task can be provided so that a user can switch from one task to another; and also col. 4, lines 1-23)

As per claim 4, Junqua teaches, "wherein the user interface data set is removed prior to the loading step in accordance with a least recently used algorithm." (col. 2, lines 42-56; reads on "the user can preferably insert a flash memory card related to one task or domain and then remove it so that another flash memory card related to a second task can be used").

As per claim 5, Junqua teaches, 'wherein the user interface data set is removed in accordance with a request by an application" (col. 2, lines 42-56; reads on "the user can preferably insert a flash memory card related to one task or domain and then remove it so that another flash memory card related to a second task can be used").

As per claim 9, Junqua teaches, "wherein the new application comprises a speech aware application, the speech aware application being responsive to user utterances for at least partially interacting with the new application" (col. 2, lines 6-15; new application is Japanese).

As per claim 10, Junqua teaches, "the device prompting the user for information comprising a spoken utterance, the device manager being responsive to spoken utterance for operatively modifying at least one of the predetermined parameter of the

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device and an application running on the device” (col. 2, lines 16-26; dialog manager allows translation module to translate the buyer’s speech from the determined semantic components to Japanese).

As per claim 11, Junqua teaches, “storing one or more user experience parameters corresponding to a familiarity of the user with a predetermined procedure of the application” (Fig. 2, element 63; Knowledge database; col. 3, lines 1-15);

“selecting a prompts from a set of prompts for presentation to the user, set of prompt including varying amounts of instruction based at least in part on experience parameters, the selected prompt substantially matching the sorted experienced parameters of the user” (col. 3, line 58 to col. 4, line 9; computer response module uses the semantics that have been recognized to generate a sentence in the buyer’s target language based on the semantic concept).

As per claim 12, Junqua teaches, “storing an internal data set including at least one of date, and time and a number of times which a predetermined procedure of an application is performed; and selecting a prompt from a set of prompts for presentation to the user, the set of prompt includes varying amounts instruction based at least in part on information included in the internal data set, selected prompt substantially matches the stored initial data set” (col. 3, lines 41-57; dialog history data file contains a log of the conversation which has occurred through the device of the present invention).

7. Claims 6-8, 13, 17 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Franz et al. (US 6,356,865).

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As per claim 6 and 19, Franz teaches, “a method of automatically providing a spoken language interface for a user with respect to at least one external network with which the user interacts, wherein the user process a portable spoken language interface device having a data structure for storing one or more user interface data sets used to provide one or more spoken language interfaces,” the method comprising the steps of:

“the device requesting a spoken language interface data set from the external network upon discovery of the external network; the external network transferring the spoken language interface data set to the device; and loading the spoken language interface data set into the data structure of the device for use by the user interfacing with the external network” (col. 9, lines 10-25, reads on “such as cellular telephone and PDA embodiments, allow users to remotely update vocabularies using various communication method in order to add new words or names or expressions and there translation.” Here discovery of the external network is inherent).

As per claim 7, Franz teaches, “wherein the device is in wireless communications with the external network” (col. 9, lines 10-25; access remotely from the unit using known methods . . .cellular telephone system).

As per claim 8, Franz teaches, “wherein the device comprises a personal assistant” (col. 9, lines 10-25;; PDA embodiments).

As per claim 13, Franz teaches, “the device prompting the user for information comprising a spoken utterance, the device manager being responsive to spoken utterance for operatively modifying at least one of the predetermined parameter of the device and an application running on the device” (col. 9, lines 29-42; perform speech-to-

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speech translation for use in facilitating communication between individuals that do not speak same language).

As per claim 16, Franz teaches, "apparatus for automatically providing contingent transfer and execution of one or more spoken language interfaces for a user with respect to at least one external network with which the user interacts," the apparatus comprising:

"a portable spoken language interface device" (col. 8, line 66 to col. 9, line 9; PDA is a portable language interface);

"a personal data assistant operatively coupled to spoken language interface device, PDA including at least one application associate therewith" (col. 8, line 43 to col. 9, line 9, STS may comprise some combination of hardware and software components that are hosted on different processor; for example PDA);

"wherein the portable spoken language interface device is operative to: (i) request a spoken language interface data set from the external network upon discovery of the external network; (ii) receiving from the external network the spoken language interface data set; and (iii) load the spoken language interface data set into the data structure of the portable spoken language interface device for use by the user interfacing with the external network" (col. 9, lines 10-25, reads on "such as cellular telephone and PDA embodiments, allow users to remotely update vocabularies using various communication method in order to add new words or names or expressions and there translation." Here discovery of the external network is inherent).

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As per claim 17, Franz teaches, "wherein the portable spoken language interface device is a wireless communication with the external network" (col. 9, lines 10-25; access remotely from the unit using known methods . . .cellular telephone system).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Junqua et al. (US 6,233,561) as applied to claim 1 above, and further in view of well known prior art (MPEP 2144.03).

As per claim 2, Junqua does explicitly not teach, "the step of audibly notifying the user that the new application is useable via the audio output system." Official Notice is taken on the well known audible notification to the user. It would have been obvious to one of ordinary skill in the art at the time of the invention to use an audible notification because an artisan with ordinary skill in the art would recognize that would help the user to know which applications are available to use.

10. Claims 14, 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franz et al. (US 6,356,865) as applied to claims 13 and 16 above, and further in view of Junqua et al. (US 6,233,561).

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As per claim 14 and 15, Franz does not explicitly teach, "storing one or more user experience parameters corresponding to a familiarity of the user with a predetermined procedure of the application";

"selecting a prompts from a set of prompts for presentation to the user, set of prompt including varying amounts of instruction based at least in part on experience parameters, the selected prompt substantially matching the sorted experienced parameters of the user".

"storing an internal data set including at lest one of date, and time and a number of times which a predetermined procedure of an application is performed; and selecting a prompt from a set of prompts for presentation to the user, the set of prompt includes varying amounts instruction based at lest in part on information included in the internal data set, selected prompt substantially matches the stored initial data set".

However, Junqua teaches, "storing one or more user experience parameters corresponding to a familiarity of the user with a predetermined procedure of the application" (Fig. 2, element 63; Knowledge database; col. 3, lines 1-15));

"selecting a prompts from a set of prompts for presentation to the user, set of prompt including varying amounts of instruction based at least in part on experience parameters, the selected prompt substantially matching the sorted experienced parameters of the user" (col. 3, line 58 to col. 4, line 9; computer response module uses the semantics that have been recognized to generate a sentence in the buyer's target language based on the semantic concept).

"storing an internal data set including at least one of date, and time and a number of times which a predetermined procedure of an application is performed; and selecting a prompt from a set of prompts for presentation to the user, the set of prompt includes varying amounts instruction based at least in part on information included in the internal data set, selected prompt substantially matches the stored initial data set" (col. 3, lines 41-57; dialog history data file contains a log of the conversation which has occurred through the device of the present invention).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use Junqua's teaching in the invention of Franz so that the a respond from the device is achieved based on the history file.

As per claim 18, Franz teaches:

- an audio input system (Fig. 2, element 202)
- an audio output system (Fig. 2, element 280)
- an speech decoding engine (Fig. 2, element 222)
- a speech synthesizing engine (Fig. 2, element 240)

Franz does not teach a dialog manger as recite in the claim. However, Junqua teaches a dialog manager (Fig. 1, element 30). Therefore, it would have been obvious to one of ordinary skill in the art the time of the invention to use a dialog manger as discloses in the Junqua in the invention of Franz so that a naturalistic conversation with a person with different language is achieved.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the

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examiner should be directed to **Abul K. Azad** whose telephone number is **(703) 305-3838**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Marsha D. Banks-Harold**, can be reached at **(703) 305-4379**.

Any response to this action should be mailed to:

Commissioner for Patents

Washington, D.C. 20231

Or faxed to:

(703) 872-9314

(For informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center's Customer Service Office whose telephone number is **(703) 306-0377**.

Abul K. Azad

June 1, 2002



**MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
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